CLAIMS IN CURRENT FORM

1. (PREVIOUSLY PRESENTED) A blood glucose monitoring system, comprising:

a. a blood glucose monitor for monitoring a blood glucose level and for producing digitally encoded blood glucose level signals representative of said blood glucose level;

b. a programmable microprocessor-based portable unit that is separate from the blood glucose monitor, said programmable microprocessor-based portable unit including 1) a video display for displaying information, said video display configured to display graphic and multi-line alphanumeric information, 2) a plurality of switches operable for interactively controlling said programmable microprocessor-based portable unit and for manipulating the information displayed on said video display, and 3) a circuit coupled to said plurality of switches for generating video signals in response to the operation of the switches;

c. a digital data storage medium, the medium

A. readable by said programmable microprocessor-based portable unit; and

B. tangibly embodying therein a program of instructions executable by said programmable microprocessor-based portable unit, said program of instructions including instructions for signal processing in response to signals generated based upon

said digitally encoded blood glucose level signals and further for signal processing of insulin dosage data and detecting a need for a change in insulin dosage;

d. a signal interface connected in signal communication with said programmable microprocessor-based portable unit and said blood glucose monitor for coupling said digitally encoded blood glucose level signals supplied by said blood glucose monitor to said programmable microprocessor-based portable unit; and

e. signal processing means connected in signal communication with said signal interface for performing signal processing functions in accordance with said program of instructions.

2. (ORIGINAL) The system of claim 1, wherein said microprocessor-based portable unit is a palm-top computer.

3. (ORIGINAL) The system of claim 1, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

4. (ORIGINAL) The system of claim 3, the program of instructions including instructions for monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

5. (ORIGINAL) The system of claim 4, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

6. (ORIGINAL) The system of claim 3, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

7. (ORIGINAL) The system of claim 3, the program of instructions further including instructions for performing a test sequence to confirm that the system is operating properly.

8. (ORIGINAL) The system of claim 1, at least a component of said signal interface being connectable with a second device, other than said blood glucose monitor, in signal communication with said programmable microprocessor-based portable unit for coupling further signals supplied by said second device to said programmable microprocessor-based portable unit.

9. (PREVIOUSLY PRESENTED) The system of claim 1, wherein said programmable microprocessor-based portable unit further comprises an interactive interface.

10. (PREVIOUSLY PRESENTED) The system of claim 9, wherein said microprocessor-based interactive portable unit is a palm-top computer.

11. (PREVIOUSLY PRESENTED) The system of claim 9, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

12. (ORIGINAL) The system of claim 11, the program of instructions including instructions for monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

13. (ORIGINAL) The system of claim 12, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

14. (ORIGINAL) The system of claim 11, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

15. (ORIGINAL) The system of claim 11, the program of instructions further including instructions for performing a test sequence to confirm that the system is operating properly.

16. (ORIGINAL) The system of claim 9, at least a component of said signal interface being connectable with a second device, other than said blood glucose monitor, in signal communication with said programmable microprocessor-based interactive portable unit for coupling further signals supplied by said second device to said programmable microprocessor-based interactive portable unit.

17. (PREVIOUSLY PRESENTED) A method of performing diabetes self-care with a system of integrated electronic devices, comprising:

powering a portable blood glucose monitor with one or more batteries;

receiving an amount of blood sufficient for a blood glucose monitor to run a blood glucose test sequence;

controlling the blood glucose test sequence;

computing a blood glucose level;

signal coupling the blood glucose monitor to a portable microprocessor-based electronic device via a first data port, wherein said portable microprocessor-based electronic device is separate from the blood glucose monitor and includes 1) a video display for displaying information, said video display configured to display graphic and multi-line alphanumeric information, 2) a plurality of switches operable for interactively controlling said

portable microprocessor-based electronic device and for manipulating the information displayed on said video display, and 3) a circuit coupled to said plurality of switches for generating video signals in response to the operation of the switches;

transmitting blood glucose test results from said blood glucose monitor to said portable microprocessor-based electronic device;

running program instructions stored in a memory of the portable microprocessor-based electronic device for performing analysis of the blood glucose test results, signal processing of insulin dosage data, and detecting a need for a change in insulin dosage; and

recording blood glucose test results and insulin dosage information in said memory of the portable microprocessor-based electronic device, said memory also containing programming for establishing a data protocol that allows digital data signal processing, and for performing said analysis of blood glucose.

18. (ORIGINAL) The method of claim 17, the receiving including inserting a test strip into a receptacle of the blood glucose monitor; and applying a drop of blood to the strip.

19. (PREVIOUSLY PRESENTED) The method of claim 17, further comprising displaying the blood glucose level on said video display.

20. (ORIGINAL) The method of claim 17, wherein said portable, microprocessor-based electronic device comprises a palm-top computer.

21. (ORIGINAL) The method of claim 17, the receiving comprising receiving a test strip including a reagent impregnated portion having blood applied thereto.

22. (ORIGINAL) The method of claim 21, the controlling comprising monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

23. (ORIGINAL) The method of claim 22, the controlling further comprising monitoring whether said test strip is properly inserted into the monitor.

24. (ORIGINAL) The method of claim 21, the controlling comprising monitoring whether said test strip is properly inserted into the monitor.

25. (ORIGINAL) The method of claim 17, the controlling comprising performing a test sequence to confirm that the system is operating properly.

26. (PREVIOUSLY PRESENTED) The method of claim 17, further comprising:

powering a second device;

signal coupling the second device to said portable microprocessor-based electronic device; and

transmitting signals from said second device to said portable microprocessor-based electronic device.

27. (PREVIOUSLY PRESENTED) The method of claim 17, wherein said portable microprocessor-based electronic device further comprises an interactive interface and said plurality of switches includes a pair of spaced-apart push button switches and another pair of switches.

28. (PREVIOUSLY PRESENTED) A blood glucose monitoring system, comprising:

a. a blood glucose monitor for monitoring a blood glucose level and for producing digitally encoded blood glucose level signals representative of said blood glucose level;

b. a programmable microprocessor-based portable unit that is separate from the blood glucose monitor, said programmable microprocessor-based portable unit including 1) a video display for displaying information, said video display configured to display graphic and multi-line alphanumeric information, 2) a plurality of switches operable for interactively controlling said programmable microprocessor-based portable unit and for manipulating the information displayed on said video display, and 3) a circuit coupled to said plurality of switches for generating video signals in response to the operation of the switches;

c. digital data storage media tangibly embodying therein processor-executable program instructions for signal processing in response to signals based upon said digitally encoded blood glucose signals and further for signal processing of insulin dosage data and detecting a need for a change in insulin dosage and further for performing a test sequence to confirm that the system is operating properly;

d. a signal interface connected in signal communication with said programmable microprocessor-based portable unit and said blood glucose monitor for coupling said digitally encoded health signals supplied by said blood glucose monitor to said programmable microprocessor-based portable unit; and

e. signal processing means connected in signal communication with said signal interface for performing signal

processing functions in accordance with said program of instructions.

29. (PREVIOUSLY PRESENTED) The system of claim 28, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

30. (PREVIOUSLY PRESENTED) The system of claim 29, the program of instructions including instructions further for monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

31. (PREVIOUSLY PRESENTED) The system of claim 29, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

32. (PREVIOUSLY PRESENTED) The system of claim 28, wherein said microprocessor-based portable unit is a palm-top computer.

33. (PREVIOUSLY PRESENTED) The system of claim 28, at least a component of said signal interface being connectable with a second device, other than said blood glucose monitor, in signal

communication with said programmable microprocessor-based portable unit for coupling further signals supplied by said second device to said programmable microprocessor-based portable unit.

34. (PREVIOUSLY PRESENTED) The system of claim 28, wherein said programmable microprocessor-based portable unit further comprises an interactive interface.

35. (PREVIOUSLY PRESENTED) The system of claim 34, wherein said microprocessor-based interactive portable unit is a palm-top computer.

36. (PREVIOUSLY PRESENTED) The system of claim 34, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

37. (PREVIOUSLY PRESENTED) The system of claim 36, the program of instructions including instructions for monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

38. (PREVIOUSLY PRESENTED) The system of claim 36, the program of instructions further including instructions for

monitoring whether said test strip is properly inserted into the monitor.

39. (PREVIOUSLY PRESENTED) The system of claim 34, at least a component of said signal interface being connectable with a second device, other than said blood glucose monitor, in signal communication with said programmable microprocessor-based interactive portable unit for coupling further signals supplied by said second device to said programmable microprocessor-based interactive portable unit.

40. (PREVIOUSLY PRESENTED) A system of interconnected devices for performing diabetes self-care, comprising:

(a) a blood glucose monitor, including:

(i) a receptacle for receiving an amount of blood sufficient for the monitor to run a blood glucose test sequence;

(ii) processing circuitry for controlling a blood glucose test sequence and computing a blood glucose level,

(iii) a battery compartment for holding a battery for powering the blood glucose monitor, and

(iv) a first data port for signal coupling to another electronic device; and

(b) a portable microprocessor-based device that is separate from the blood glucose monitor and signal coupled with the blood glucose monitor, including:

(i) a second data port for signal coupling with the first data port and receiving blood glucose test results from said blood glucose monitor,

(ii) a microprocessor that runs according to program instructions stored in a memory for performing analysis of the blood glucose test results, signal processing of insulin dosage data, and detecting a need for a change in insulin dosage,

(iii) a memory for recording the recorded blood glucose test results and insulin dosage information therein, and for containing programming for establishing a data protocol that allows digital data signal processing, and for performing analysis of blood glucose test results,

(iv) a video display for displaying information, said video display configured to display graphic and multi-line alphanumeric information,

(v) a plurality of switches operable for interactively controlling said portable microprocessor-based device and for manipulating the information displayed on said video display, and

(vi) a circuit coupled to said plurality of switches for generating video signals in response to the operation of the switches.

41. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, wherein said receptacle is for receiving a test strip upon which a drop of blood is applied.

42. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, the blood glucose monitor further comprising a display for displaying the blood glucose level.

43. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, wherein said microprocessor-based portable unit is a palm-top computer.

44. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

45. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 44, the program of instructions including instructions for monitoring whether a sufficient amount of blood

has been applied to said reagent impregnated portion of the test strip.

46. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 45, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

47. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 44, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

48. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 44, the program of instructions further including instructions for performing a test sequence to confirm that the system is operating properly.

49. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, further comprising a second device, other than said blood glucose monitor, comprising a third data port, said second data port of said portable microprocessor-based device further for signal coupling with the third data port and receiving a signal from said second device.

50. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 40, wherein the portable microprocessor-based device further comprises an interactive interface.

51. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 50, wherein said receptacle is for receiving a test strip upon which a drop of blood is applied.

52. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 50, the blood glucose monitor further comprising a display for displaying the blood glucose level.

53. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 50, wherein said microprocessor-based portable unit is a palm-top computer.

54. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 50, the blood glucose monitor for receiving a test strip including a reagent impregnated portion having blood applied thereto.

55. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 54, the program of instructions including

instructions for monitoring whether a sufficient amount of blood has been applied to said reagent impregnated portion of the test strip.

56. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 55, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

57. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 54, the program of instructions further including instructions for monitoring whether said test strip is properly inserted into the monitor.

58. (PREVIOUSLY PRESENTED) The system of interconnected devices of claim 54, the program of instructions further including instructions for performing a test sequence to confirm that the system is operating properly.

59. (PREVIOUSLY PRESENTED) The system of claim 50, further comprising a second device, other than said blood glucose monitor, comprising a third data port, said second data port of said portable microprocessor-based device further for signal

coupling with the third data port and receiving a signal from said second device.

60. (PREVIOUSLY PRESENTED) The system of claim 1, wherein said video display has a resolution sufficient to display at least six lines of alphanumeric information, as well as allowing graphical representation of statistical data.